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Sheet 1 of 3

| | FORM PTO-1449 | | MENT OF COMMERCE | Attorney Docket No. | | 50154/00 | 50154/002002 | |
|---|---|---------------------|-----------------------------|---------------------|-------------|------------|--------------------------------|--|
| (MODIFIED) PATENT AND TRADEMARK C | | | J TRADEMARK OFFICE | Serial No. | | 09/496,231 | | |
| | Applicant | | Jeffrey A. Hubbell et al. | | | | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) | | | | | Filing Date | | February 1, 2000 | |
| | | | | | Group | | Not Yet Assigned | |
| 37 CFR §1.98 | IDS Filed | | July 31, 2000 | | | | | |
| | | | U.S. PATENTS | <u> </u> | | | | |
| Examiner's Initials | Patent Number | Issue Date | Patentee | | Class | Subclass | Filing Date (If Appropriate | |
| SIF | 5,268,305 | 12/07/93 | Ribi et al. | | 436 | 501 | | |
| <u> </u> | 5,330,911 | 7/19/94 | Hubbell et al. | | 435 | 240.243 | | |
| | 5,427,915 | 6/27/95 | Ribi et al. | | 435 | 7.92 | | |
| | 5,446,090 | 8/29/95 | Harris | | 525 | 54.1 | | |
| | 5,567,422 | 10/22/96 | Greenwald | | 424 | 78.3 | | |
| | 5,635,207 | 6/3/97 | Grinstaff et al. | | 424 | 450 | | |
| | 5,752,974 | 5/19/98 | Rhee et al. | | 606 | 214 | | |
| | 5,874,500 | 2/23/99 | Rhee et al. | | 525 | 54.1 | | |
| V | 5,897,955 | 4/27/99 | Drumheller | | 428 | 422 | | |
| | FORE | IGN PATENT (| OR PUBLISHED FOREIGN | PATENT AF | PPLICATION | NC | | |
| Examiner's Initials | Document Number | Publication Date | Country or Patent Office | | Class | Subclass | Translation (Yes/No) | |
| SH | WO 95/13312 | 18.05.95 | PCT | | | | - | |
| 1 | WO 97/22371 | 26.06.97 | PCT | | | | | |
| | WO 99/22770 | 14.05.99 | PCT | | | | | |
| | WO 99/34833 | 15.7.99 | PCT | | | | | |
| V | WO 99/14259 | 25.3.99 | PCT | | | | | |
| | OTHER DOCL | JMENTS (INCL | UDING AUTHOR, TITLE, E | DATE, PLACI | E OF PUB | LICATION) | | |
| SH | Ballini et al., "Amberlyst A-27, an Efficient Heterogeneous Catalyst for the Michael Reactions of Nitroalkanes with β-Substituted Alkene Acceptors," <i>J. Org. Chem.</i> 61:3209-3211, 1996. | | | | | | | |
| SA | Boyland et al., "Enzymes Catalysing Conjugations of Glutathione with Alpha-beta-unsaturated Carbonyl Compounds," Biochem. J. 109:651-661, 1968. | | | | | | | |
| EXAMINER | | NIAM | DATE CO | NSIDERED | 12 | -/(20) | | |

| | FORM PTO-1449 U.S. DEPARTMENT OF COM | | Attorney Docket No. | 50154/002002 | | |
|---|---|------------|---------------------|---------------------------|--|--|
| (MODIFIED) PATENT AND TRADEMARK OFFICE | | | Serial No. | 09/496,231 | | |
| | | | Applicant | Jeffrey A. Hubbell et al. | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | | | Filing Date | February 1, 2000 | | |
| (Use several sheets if necessary) | | | Group | Not Yet Assigned | | |
| (37 CFR §1.98(b)) | | | IDS Filed | July 31, 2000 | | |
| | OTHER DOCUMENTS (INCLUDING AUTHOR | , TITLE, C | OATE, PLACE OF PUBL | ICATION) | | |
| SH | Chasseaud, "Distribution of Enzymes that Catalyse Reactions of Glutathione with Alpha Beta-unsaturated Compounds," Biochem. J. 131:765-769, 1973. | | | | | |
| | Eisele et al., "Kinetics of Photocrosslinking Reactions of a DCPA/EA Matrix in the Presence of Thiols and Acrylates," J. Polym. Sci., Polym. Chem. Ed. 35:2333-2345, 1997. | | | | | |
| | Fan et al., "Molecular Recognition and Catalysis: Incorporation of an 'Oxyanion Hole' into a Synthetic Receptor," New J. Chem. 21(1):81-85, 1997. | | | | | |
| | Friedman et al., "Relative Nucleophilic Reactivities of Amino Groups and Mercaptide Ions in Addition Reactions with α,β-Unsaturated Compounds," <i>J. Am. Chem. Soc.</i> 87(16):3672-3682, 1965 | | | | | |
| | Ghandehari et al., "In Vitro Degradation of pH-sensitive Hydrogels Containing Aromatic Azo Bonds," Biomaterials 18:861-872, 1997. | | | | | |
| | Hern et al., "Incorporation of Adhesion Peptides into Non-adhesive Hydrogels Useful for Tissue Resurfacing," J. Biomed. Mater. Res. 39:266-276, 1998. | | | | | |
| | Hirai et al., "pH-induced Structure Change of Poly(vinyl alcohol) Hydrogel Crosslinked with Poly(acrylic acid)," Die Angewandte Makromolekulare Chemie 240:213-219, 1996. | | | | | |
| | Ishihara et al., "Tris(pentafluorphenyl)boron as an Efficient, Air Stable, and Water Tolerant Lewis Acid Catalyst," Bull. Chem. Soc. Jpn. 68:1721-1730, 1995. | | | | | |
| | Kawai et al., "New Application of Solid Acid to Carbon-Carbon Bond Formation Reactions: Clay Montmorillonite-Catalyzed Aldol Reactions of Silyl Enol Ethers with Aldehydes and Acetals," <i>Bull. Chem. Soc. Jpn.</i> 61:1237-1245, 1988. | | | | | |
| | Kito et al., "Biocompatible Coatings for Luminal and Outer Surfaces of Small-caliber Artificial Grafts," Journal of Biomedical Materials Research 30:321-330, 1996. | | | | | |
| | Mathur et al., "Methods for Synthesis of Hydrogel Networks: A Review," Journal of Macromolecular Science-Reviews in Macromolecular Chemistry and Physics C36(2):405-430, 1996. | | | | | |
| | Moghaddam et al., "Molecular Design of 3-Dimensional Artificial Extracellular-matrix - Photosensitive Polymers Containing Cell Adhesive Peptide," <i>Journal of Polymer Science: Part A: Polymer Chemistry</i> 31:1589-1597, 1993. | | | | | |
| | Morpurgo et al., "Preparation and Characterization of Poly(ethylene glycol) Vinyl Sulfone," <i>Bioconjugate Chem.</i> 7:363-368, 1996. | | | | | |
| EXAMINER | & Man | DATE CO | NSIDERED / 2/ | 00 | | |
| EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant. | | | | | | |

Sheet 3 of 3

| SUBSTITUTE FORM PTO-1449 U.S. DEPARTMENT OF COMME (MODIFIED) PATENT AND TRADEMARK OFF | | Attorney Docket No. | 50154/002002 | | |
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| (110011120) | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Serial No. | 09/496,231 | | |
| INTERPLATION PLOCE COLUDE | | Applicant | Jeffrey A. Hubbell et al. | | |
| | INFORMATION DISCLOSURE STATEMENT BY APPLICANT | Filing Date | February 1, 2000 | | |
| (Use several sheets if necessary) | | Group | Not Yet Assigned | | |
| (37 CFR §1.98(b)) | | IDS Filed | July 31, 2000 | | |
| | OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, | DATE, PLACE OF PUBL | ICATION) | | |
| SH I | Pato et al., "Polymers Containing Enzymatically Degradable Bonds, 9 ^{a)} Chymotrypsin Catalyzed Hydrolysis of a p-nitroanilide Drug Model, Bound Via Oligopeptides onto Poly(vinylpyrrolidone-co-maleic anhydride)," <i>Makromol. Chem.</i> 185:231-237, 1984. | | | | |
| | Pathak et al., "Rapid Photopolymerization of Immunoprotective Gels in Contact with Cells and Tissue," Journal of the American Chem. Society 114:8311-8312, 1992. | | | | |
| | Petka et al., "Reversible Hydrogels from Self-Assembling Artificial Proteins," Science 281:389-392, 1998. | | | | |
| | Romanowska et al., "Michael Additions for Syntheses of Neoglycoproteins," Methods in Enzymol. 242:90-101, 1994. | | | | |
| | Sawhney et al., "Bioerodible Hydrogels Based on Photopolymerized Poly(ethylene glycol)-co-poly(α-hydroxy acid) Diacrylate Macromers," <i>Macromolecules</i> 26:581-587, 1993. | | | | |
| | Tanaka et al., "Michael-type Addition of Illudin S, a Toxic Substance from Lampteromyces japonicus, with Cysteine and Cysteine-containing Peptides In Vitro," Chem. Pharm. Bull. 44:273-279, 1996. | | | | |
| | West et al., "Comparison of Covalently and Physically Cross-linked Polyethylene Glycol-based Hydrogels for the Prevention of Postoperative Adhesions in a Rat Model," <i>Biomaterials</i> 16:1153-1156, 1995. | | | | |
| | Zhao et al., "Novel Degradable PEG Esters for Drug Delivery: Synthesis and Characterization," <i>Polymer Reprints</i> 38:526-527, 1997. | | | | |
| EXAMINER | DATE O | ONSIDERED / | 2/00 | | |
| | ial citation considered. Draw line through citation if not in xt communication to applicant. | conformance and not con | sidered. Include copy of this | | |